

## ABSTRACT OF THE DISCLOSURE

A system for simultaneous ACLR measurements encompassing multiple wireless communications channels provides a dual channel processing. The input signal is down converted to produce a wideband signal that is input simultaneously to both a wideband channel having a high speed, low resolution ADC and a narrow band channel having a low speed, high resolution ADC. The resulting data streams from the ADCs are processed by a DSP to provide the simultaneous ACLR measurements.